


MASS. AF26. 2: P92/986

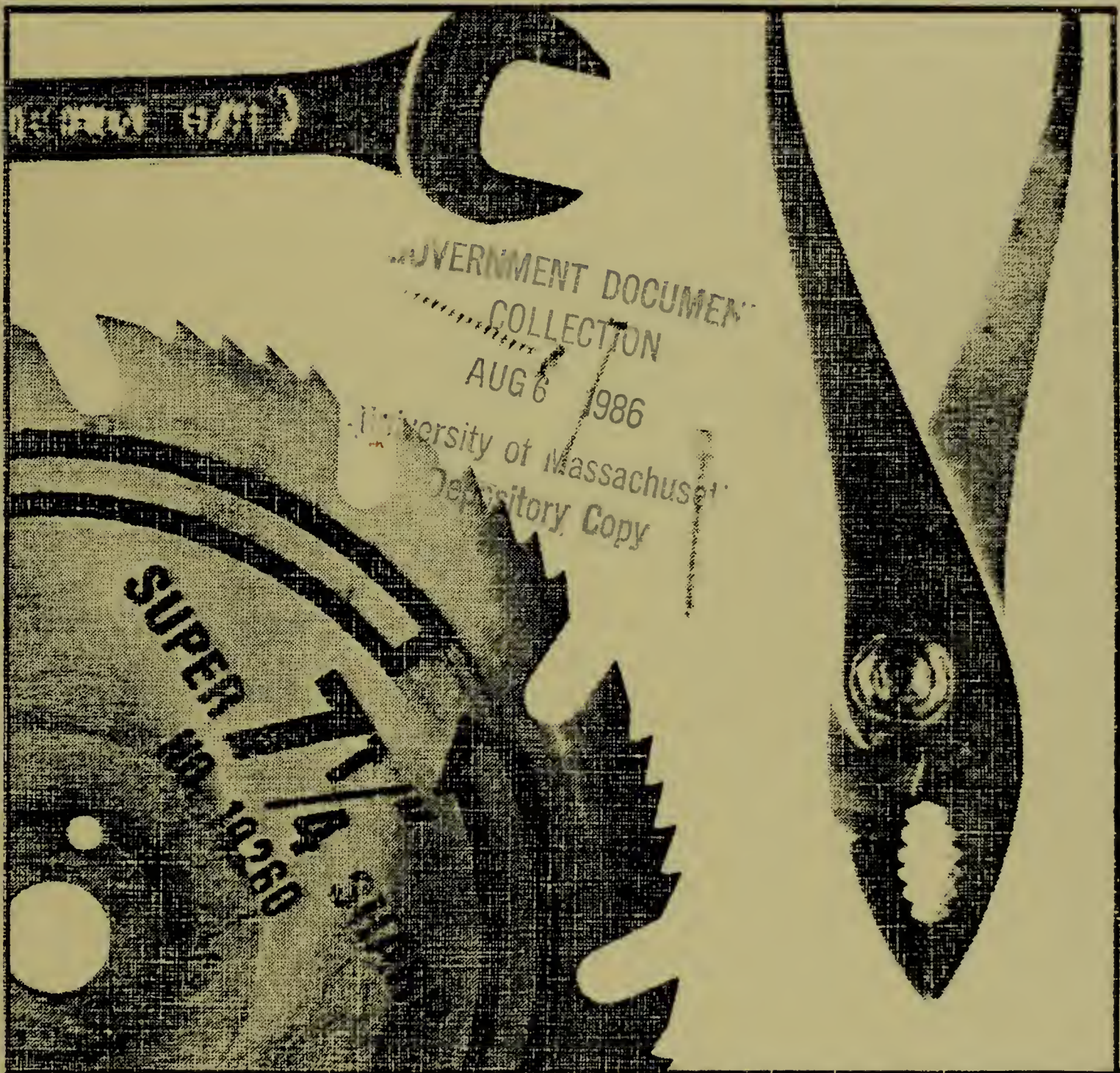
✓

★ UMMA/AMHERST ★



312066 0269 7039 6

# PRESERVATION WORKBOOK FY 86



DIVISION OF CAPITAL PLANNING & OPERATIONS

TUNNEY F. LEE DEPUTY COMMISSIONER

Prepared by Pequod Associates and Arrowstreet Inc.  
for use in the FY 86 budgeting process



---

# PRESERVATION WORKBOOK

---

Guidance for facilities manager in preparing  
budget data for preservation measures as part  
of LONG RANGE FACILITIES DEVELOPMENT PLANS

FISCAL YEAR 1986

---

SEPTEMBER 10, 1984

---



## INTRODUCTION

This workbook is designed to help a facility engineer determine the full scope of repair and maintenance projects as needed to correct deficiencies and preserve the facility. Preservation deficiencies are defined in the Division of Capital Planning and Operations' Long Range Capital Facilities Development Plan for FY86 as "...problems which if not corrected will cause damage to the property and greater expense later,...". The information the facility manager collects and organizes can then be used to strengthen in-house maintenance planning and management, as well as serve as the basis for the FY86 capital budgeting requested.

Our intent of this survey is to determine the full scope of major repairs needed to bring the buildings up to a standard from which they can be maintained through regular operating funds. Thus, the goal is to have this inventory serve as the basis of a program whereby the DCPO can plan to correct these deficiencies over the next few years.

Although the workbook presents many of these problems and may be useful in jogging your memory, it is not a checklist of all the things that could go wrong at your facility. We know you know what really needs to be done to keep your buildings going. The workbook is a way of organizing that knowledge for internal planning and transferring that knowledge all the way through the state's budgeting process.

The following material is organized by "hazards". These are general categories of deficiencies which must be addressed if the Commonwealth is to preserve the building in which the hazard exists. Hazards are defined at the beginning of their respective sections in the workbook.

Each hazard is further described by a series of conditions which are typical and occur, we think, from time to time at state facilities. As you will see, not all hazards and certainly not all the conditions cited will be found at any one facility. Furthermore, not every condition you may encounter at your facility which should be addressed to preserve a building is listed as a common deficiency. At the end of each hazard section, you have space to describe conditions at your facility that are not listed. We will be surprised if you do not have several conditions unique to your facility.

You are asked several questions about each condition and given one or more typical methods of correction as guides for describing a condition that exists, in your judgement, at your facility. The typical methods and their respective unit costs are based on average sites and straightforward installations. These are presented as a convenience; you must state the method you propose to correct the condition being described and a unit cost for getting it done. You must also describe and cost unusual construction or design limitations such as difficult access, etc., if any exist. As a check, the amount you estimated should be what you expect a responsible bid would be today to do the work.

---

Unit costs are intended as an estimate of total contractors cost for routine corrective action. In places where no unit costs are given, the variation in costs was too great to fix standardized prices. The suggested unit costs assume that the DCPO will administer the project, so the somewhat higher construction costs associated with this are included.

These unit costs assume the project will be done immediately and include no escalation. They include no contingencies, allowances for error or consideration of conditions which are not "routine". Any work required to demolish, gain access, refinish, rig, resupport or otherwise add to the basic correction must be described and estimated as a special, local condition and added to the cost developed using our unit costs. If you use your own units costs, you should use the same assumptions. The total of these numbers is your estimated construction cost (ECC). Calculate the total project cost by multiplying the ECC by 1.33 to incorporate all construction administration costs. Construction administration costs include the Resident Engineer, testing, advertising and printing, and the construction contingency, which increases the estimated construction costs by 1.33.

Please scan through all of the categories covered in the workbook first. This should give you a better idea of how to incorporate all of your information into this format. Use the workbook to describe and cost all the preservation deficiencies you have. Leave blank those conditions that don't apply, fill in the ones that do, and add any in the spaces provided that aren't covered adequately by the conditions listed. Send the whole workbook in with your capital budget request.

Thanks for your cooperation. We think the time you spend doing this will help us understand your needs better and help you get what you really need a little easier.

---

## HOW TO USE THIS WORKBOOK

1. Scan the entire workbook.

Get a sense of how the workbook is organized before you fill in any of the categories.

2. Fill in our blanks.

Follow the directions on the next page, step by step.

3. Check n.a.-(not applicable) for those items which do not apply to your facility. Make sure each condition is covered only in one place. Mark a reference to where the similar condition is covered, if necessary.

4. Fill in your blanks.

There are blanks at the end of each section. Use these to identify conditions unique to your facility or that we have overlooked. Wherever possible, write in unit costs and quantities.

5. Send it in.

The entire completed workbook, along with whatever supporting information you feel is appropriate, should be returned to your agency central office. Make a copy for your records. The agency will then send a copy to the Division of Capital Planning and Operations for use in the capital budgeting procedure.

---

## HOW TO FILL IN THE BLANKS

### 1. Identify a problem:

- a.) Read hazard description.
- b.) Read first condition.
- c.) Decide if applicable. If not, go to next hazard.
- d.) If applicable, describe major consequences in taking no corrective action.

### 2. Identify the corrective method:

Circle one of our corrective choices or write what has to be done.

### 3. Choose a unit of cost:

Where practical, basic unit costs are given. These are suggested only (dollars per square foot, per linear foot, etc.). Circle the unit cost you are using or write in the unit cost you are using.

### 4. Locate and calculate:

Indicate specifically where in your facility the problem is located. Fill in the quantity (square feet, linear feet, etc.). Multiply the unit cost by the quantity in the formula provided.

### 5. Identify special conditions:

Explain factors unique to your facility that will add to the construction cost. Estimate the total cost due to the special conditions.

### 6. Total all costs.

Add the basic and special conditions costs and write in the total as your estimated construction cost (ECC). Calculate the total project cost by multiplying the ECC by 1.33 to incorporate all construction administration costs.

SAMPLE PAGES

Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITOL FACILITIES DEVELOPMENT PLAN FY 86

FIRE/EXPLOSION HAZARDS

Any condition which, if not addressed, could

- 1) cause fire or explosion and result in personal injury, major reconstruction expense and/or loss of use of a facility; or,
- 2) aggravate or increase the loss due to a fire or explosion by failure of required fire safety/suppression systems.

TYPICAL CONDITIONS

1. Leak in fuel or combustible liquid tank

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Replace tank \$160/GAL  
Suggested Unit Price  
Method proposed and locations: REPLACE TANK

Total quantity 10,000 GAL x unit price \$160/GAL = \$1,600,000

Local or special conditions adding to unit cost:

BURIED UNDER BLACKTOP PARKING LOT

Cost = \$3,200

Total Estimated Construction Cost (E.C.C.) = \$19,200

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \$25,536

2. Leak in fuel or other combustible pipe

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Replace pipe SEE PIPING  
Suggested Unit Price Repair pipe NOMOGRAPH  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

INTRODUCTION

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITOL FACILITIES DEVELOPMENT PLAN FY 86

### 5. Opening in boiler, incinerator, kiln or other combustion chamber

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Replace chamber	_____
Rebrick chamber	_____
Replace device	_____

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

### 6. Inadequate exhaust of combustible fumes

- What will happen in this case if work is not done? GAS STERILIZER  
FUMES CARCINOGENIC AND EXPLOSIVE; PERSONNEL HAZARD;  
MUST BE INSTALLED TO RUN CSR.

- Correction: Typical Methods and Suggested Unit Price
 

Install exhaust system	<u>\$ 2.50/CFM</u>
------------------------	--------------------

Method proposed and locations: INCREASE CFM (AND  
VELOCITY) OF EXISTING FAN FROM 200 TO 800 CFM

Total quantity 600 CFM x unit price \$ 1.80 = \$ 1080

Local or special conditions adding to unit cost: \_\_\_\_\_

ABOVE PLASTERED CEILING IN CSR; NIGHT WORK  
ONLY.

Cost = \$ 2200

Total Estimated Construction Cost (E.C.C.) = \$ 3280

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \$ 4362

# Preservation Workbook

INTRODUCTION

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITOL FACILITIES DEVELOPMENT PLAN FY 86

7. Other fire/explosion hazard conditions: (state condition) HIGH LEVEL OF ETO GAS FROM STERILIZER IN CSR, BLDG 4

- What will happen in this case if work is not done? GAS IS TOXIC AND VOLATILE / EXPLOSION NOT LIKELY BUT POSSIBLE

- Correction:

Method proposed and locations: INSTALL ADDED EXHAUST SYSTEM TO ROOF VENTILATOR

Total quantity 2000 CFM x unit price \$ 2.50/CFM = \$ 5000

Local or special conditions adding to unit cost:

MUST BE DONE BETWEEN 10 PM AND 6 AM

Cost = \$ 1200

Total Estimated Construction Cost (E.C.C.) = \$ 6200

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \$ 8246

8. Other mechanical fire/explosion hazard condition: (state condition) SUCTION LEAK IN GAS PRESSURE BOOSTER

- What will happen in this case if work is not done? AS CONDITION WORSENS, AIR/GAS MIXTURE APPROACHES COMBUSTIBLE LEVEL - PREMATURE IGNITION OR EXPLOSION

- Correction:

Method proposed and locations: REPLACE BOOSTER HOUSING

Total quantity 1 x unit price \$ 800 EA. = \$ 800

Local or special conditions adding to unit cost: ACCESS IN

TIGHT VAULT REQUIRES CRANES AND RIGGERS

Cost = \$ 600

Total Estimated Construction Cost (E.C.C.) = \$ 1400

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \$ 1862

---

# Preservation Workbook

for preparation of      LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN      FY 86

---

## TABLE OF CONTENTS

### A. FIRE EXPLOSION HAZARDS.....2

#### Conditions

1. Leak in fuel or combustible liquid tank
2. Leak in fuel or other combustible pipe
3. Faulty combustion control
4. Faulty low water or other boiler safety device
5. Opening in boiler, incinerator, kiln or other combustion chamber
6. Accumulation of combustible fumes
7. Overloaded circuit
8. Insulation breakdown
9. Poor connections/arcing
10. Hot switch gear (with rated load)
11. Hot transformer (with rated load)
12. Failure/misapplication of circuit breaker or other current limiting device
13. Inoperative emergency generator
14. Inoperative sprinkler system main valve
15. Inoperative sprinkler system fire pump
16. Inadequate sprinkler system coverage
17. Inadequate or misapplied special extinguishing system (CO, Halon, etc.)
18. Inadequate smoke detectors
19. Inoperative/inadequate fire alarm system
20. Inadequate smoke control ventilation in buildings over four stories
21. Separation of hazardous materials
22. Protection of building contents
23. Protection of occupants

### B. THEFT & VANDALISM.....16

#### Conditions

1. Theft or vandalism of building contents from outside
2. Theft or vandalism of building contents from inside
3. Vandalism of building exterior
4. Vandalism by building occupants

### C. STRUCTURAL FAILURE.....22

#### Conditions

1. Cracked wood joint and beams
  2. Dry, rotted wood structural members
  3. Rusted steel members
  4. Sagging steel members
  5. Cracked concrete beams and columns
  6. Spalling on concrete beams, columns and bearing walls
-

---

# Preservation Workbook

for preparation of      LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN      FY 86

---

7. Cracked masonry bearing walls
8. Bowing masonry bearing walls
9. Masonry bearing walls crumbling
10. Structural collapse of any type
11. Unrepaired fire damage
12. Building settlement

## D. WATER PENETRATION AND DAMAGE.....32

### Conditions

1. Built-up roofing and flashing leaking
2. Rubber membrane roofing and flashing leaking
3. Metal roofing and flashing leaking
4. Asphalt tile roofing leaking
5. Slate or tile roofing leaking
6. Damaged or missing flashings
7. Damaged or missing gutters and downspouts
8. Leaking metal wall panels or siding
9. Leaking wood siding
10. Cracked or spalled precast concrete work
11. Leaking through windows
12. Leaking around doors
13. Leaking at vents and hatches
14. Leaking through basement walls
15. Leaking through basement floors
16. Site flooding
17. Erosion
18. Weakened or inadequate flood control systems
19. Sewage pipe stoppage
20. Storm drain stoppage
21. Pipe corrosion
22. Tank failure
23. Inoperative sewage pump
24. Inoperative sump pumps

## E. FAILURE OF FINISH SURFACES.....48

### Conditions

1. Worn out resilient floors (V.A.T., sheet vinyl, cork, linoleum, asphalt tile)
  2. Lifting resilient floors
  3. Damaged resilient flooring
  4. Dusting concrete floors
  5. Carpet worn out
  6. Damaged carpet
  7. Wood floors worn out
-

---

## Preservation Workbook

for preparation of      LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN      FY 86

---

8. Wood floors damage
9. Terrazzo pitted and/or cracked
10. Ceramic tiles coming off floors and/or walls
11. Broken ceramic tile
12. Grout failure in ceramic tile
13. Plaster walls and/or ceilings cracked or broken
14. Water damaged plaster
15. Drywall walls and/or ceilings cracked or broken
16. Drywall damaged by water
17. Wood paneling damaged
18. Vinyl wall covering delaminating
19. Vinyl wall covering damaged
20. Accoustic wall panels damaged
21. Acoustic lay-in panel ceilings damaged
22. 12 x 12 acoustic tile ceilings damaged
23. Metal ceilings damaged
24. Wood ceilings damaged
25. Sprayed acoustic ceilings damaged
26. Cabinetwork doors and drawers not working
27. Cabinetwork and/or countertops damaged
28. Damaged laboratory tops
29. Repainting

F. FREEZING.....66

### Conditions

1. Inoperative or inadequate heat distribution devices
2. Inoperative or inadequate heating terminal devices
3. Inoperative or inadequate boilers or furnaces
4. Inoperative heating controls
5. Insufficient insulation
6. Inoperative dry pipe sprinkler system

G. LIFE EXPECTANCY.....72

### Conditions

1. Boilers
  2. Electric Motors
  3. Chillers
  4. Controls
  5. Cooling tower
  6. Air handling units
  7. Pumps
  8. Generators
  9. Transformers
-

---

# Preservation Workbook

for preparation of      LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN      FY 86

---

10. Turbines
11. DHW Heaters
12. Elevator inoperative
13. Elevator cab damaged
14. Escalator inoperative
15. Escalator damaged
16. Dumbwaiter inoperative

H. HABITABILITY.....84

## Conditions

1. Inadequate heating
2. Inadequate cooling
3. Inadequate operable plumbing fixtures
4. Inadequate lighting
5. Inadequate ventilation
6. Excessive noise
7. Presence of airborne asbestos
8. Presence of lead paint in spaces occupied by children under the age of six

I. OTHER HAZARDS.....92

J. APPENDICES.....98

1. Piping Nomograph
  2. Cable Nomograph
-



## FIRE EXPLOSION

---

A

### Conditions

1. Leak in fuel or combustible liquid tank
  2. Leak in fuel or other combustible pipe
  3. Faulty combustion control
  4. Faulty low water or other boiler safety device
  5. Opening in boiler, incinerator, kiln or other combustion chamber
  6. Accumulation of combustible fumes
  7. Overloaded circuit
  8. Insulation breakdown
  9. Poor connections/arcing
  10. Hot switch gear (with rated load)
  11. Hot transformer (with rated load)
  12. Failure/misapplication of circuit breaker or other current limiting device
  13. Inoperative emergency generator
  14. Inoperative sprinkler system main valve
  15. Inoperative sprinkler system fire pump
  16. Inadequate sprinkler system coverage
  17. Inadequate or misapplied special extinguishing system (CO, Halon, etc.)
  18. Inadequate smoke detectors
  19. Inoperative/inadequate fire alarm system
  20. Inadequate smoke control ventilation in buildings over four stories
  21. Separation of hazardous materials
  22. Protection of building contents
  23. Protection of occupants
-

**FIRE/EXPLOSION HAZARDS**

Any condition which, if not addressed, could

- 1) cause fire or explosion and result in personal injury, major reconstruction expense and/or loss of use of a facility; or,
- 2) aggravate or increase the loss due to a fire or explosion by failure of required fire safety/suppression systems.

**TYPICAL CONDITIONS**

1. Leak in fuel or combustible liquid tank

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_

- Correction: Typical Methods and Replace tank \$1.60/Gal.  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 2. Leak in fuel or other combustible pipe

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Replace pipe      See Piping Nomograph\*  
Repair pipe

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 3. Faulty combustion control

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Replace controls      \$1,300

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

\*See Appendix J.1.

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 4. Faulty low water or other boiler safety device

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Replace control \$1,100  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 5. Opening in boiler, incinerator, kiln or other combustion chamber

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Rebrick chamber \$4/MBH  
Suggested Unit Price Replace chamber \$7/MBH  
Replace device \$15/MBH

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 6. Accumulation of combustible fumes

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Install exhaust system \$2.50/CFM  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 7. Overloaded circuit

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Install new distributor \$3.50/Amp  
Install new transformer/  
switchboard \_\_\_\_\_  
Install new substation/  
service (over 400 KVA) \$88/KVA

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 8. Insulation breakdown

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price Replace cable See Cable  
Method proposed and locations: \_\_\_\_\_ Nomograph\*

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 9. Poor connections/arcing

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price Replace 100 terminals \$.23/Amp  
Repair 100 terminals \$.15/Amp  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

\*See Appendix J.2.

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 10. Hot switch gear (with rated load)

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price Replace switch gear 4.00/Amp  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 11. Hot transformer (with rated load)

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price Replace transformer \$40.00/KVA  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 12. Failure/misapplication of circuit breaker or other current limiting device

- What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price Replace circuit breaker \$1.70/Amp

Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 13. Inoperative emergency generator

- What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price Replace generator \$450/KW Overhaul generator \$150/KW

Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 14. Inoperative sprinkler system main valve

- What will happen in this case if work is not done? \_\_\_\_\_

Correction: Typical Methods and	Replace 4" main valve	\$1,200
Suggested Unit Price	Replace 6" main valve	\$2,300

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 15. Inoperative sprinkler system fire pump

- What will happen in this case if work is not done? \_\_\_\_\_

Correction: Typical Methods and	Replace pump	\$40/GPM
Suggested Unit Price	Replace motor	\$40/HP
	Overhaul pump	\$13/GPM

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

16. Inadequate sprinkler system coverage

- What will happen in this case if work is not done? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- |  |                          |                       |
|--|--------------------------|-----------------------|
| Correction: Typical Methods and<br>Suggested Unit Price                  | Install additional heads | \$1.35/s.f.           |
| Method proposed and locations: _____<br>_____<br>_____<br>_____          |                          |                       |
| Total quantity _____ x unit price _____                                  |                          | = _____               |
| Local or special conditions adding to unit cost: _____<br>_____<br>_____ |                          |                       |
|  |                          | Cost = _____          |
| Total Estimated Construction Cost (E.C.C.)                               |                          | = _____               |
| Total Project Cost (including D.C.P.O. costs):                           |                          | E.C.C. x 1.33 = _____ |

17. Inadequate or misapplied special extinguishing system (CO2, Halon, etc.)

- What will happen in this case if work is not done? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- |  |                          |                       |
|--|--------------------------|-----------------------|
| Correction: Typical Methods and<br>Suggested Unit Price                  | Install new system       | \$2.70/s.f.           |
|  | Redesign existing system | \$1.20/s.f.           |
| Method proposed and locations: _____<br>_____<br>_____<br>_____          |                          |                       |
| Total quantity _____ x unit price _____                                  |                          | = _____               |
| Local or special conditions adding to unit cost: _____<br>_____<br>_____ |                          |                       |
|  |                          | Cost = _____          |
| Total Estimated Construction Cost (E.C.C.)                               |                          | = _____               |
| Total Project Cost (including D.C.P.O. costs):                           |                          | E.C.C. x 1.33 = _____ |

# Preservation Workbook

facility.....

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

## 18. Inadequate smoke detectors

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Install new detectors \$ .70/s.f.  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 19. Inoperative/inadequate fire alarm system

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Redesign existing system \$ .70/s.f.  
Install new system \$1.65/s.f.  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 20. Inadequate smoke control ventilation in buildings over four stories

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Install new ventilation system      \$2.30/CFM  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 21. Separation of hazardous materials

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 22. Protection of building contents

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and  
Suggested Unit Price \_\_\_\_\_  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 23. Protection of occupants

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## THEFT & VANDALISM

B

### Conditions

1. Theft or vandalism of building contents from outside
  2. Theft or vandalism of building contents from inside
  3. Vandalism of building exterior
  4. Vandalism by building occupants
-

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## HAZARD: THEFT AND VANDALISM

Any condition which, if not addressed, will allow entry for the purpose of theft or allow vandalism to occur, leading to loss of contents, danger to the security of occupants, or to property. Indications of such conditions are where such incidents have already occurred or where protective devices no longer operate.

### TYPICAL CONDITIONS

#### 1. Theft or vandalism of building contents from outside

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_

• Correction: Typical Methods and Suggested Unit Price	Door locks	\$60 each
	Window locks	\$25 each
	Security fencing	\$15/l.f.
	Burglar alarms	\$1.30/s.f.
	Block up windows	\$12/s.f.
	Night lighting	\$85/fixture
	Surveillance systems	\$210/fixture

Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 2. Theft of building contents from inside

- What will happen in this case if work is not done? \_\_\_\_\_

Correction: Typical Methods and Suggested Unit Price	Door locks	\$60 each
	Lockers	\$140 each
	Cabinet locks	\$20 each
	Burglar alarms	\$1.30/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 3. Vandalism of building exterior

- What will happen in this case if work is not done? \_\_\_\_\_

Correction: Typical Methods and Suggested Unit Price	Night lighting	\$85/fixture
	Fencing	\$15/l.f.
	New exterior surface finish	\$0.85/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 4. Vandalism by building occupants

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and New interior surface finishes  
Suggested Unit Price (Flooring, walls, ceilings) \$3/s.f.  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

Preservation Workbook

facility.....

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## STRUCTURAL FAILURE

---

### Conditions

1. Cracked wood joint and beams
  2. Dry, rotted wood structural members
  3. Rusted steel members
  4. Sagging steel members
  5. Cracked concrete beams and columns
  6. Spalling on concrete beams, columns and bearing walls
  7. Cracked masonry bearing walls
  8. Bowing masonry bearing walls
  9. Masonry bearings walls crumbling
  10. Structural collapse of any type
  11. Unrepaired fire damage
  12. Building settlement
-

STRUCTURAL FAILURE

Any condition which, if not addressed, will lead to the structural failure of any building element and cause further damage to the life, property, or function of a facility.

TYPICAL CONDITIONS

1. Wood joist or beam cracked

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Shoring (price per l.f. of structural member)      \$6/l.f.  
Replacement (price per s.f. of floor zone)      \$12/s.f.  
Structural survey      \_\_\_\_\_

Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 2. Wood structural members dry rotted

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Eliminate water - pump work	\$150/day
Shoring (price per l.f. of structural member)	\$6/l.f.
Reinforcement	\$0.50/s.f.
Replace wood (price per s.f. of floor zone)	\$8.00/s.f.
Structural survey	

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 3. Steel structure rusted

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Structural survey	
Sandblasting and painting	\$1/s.f.
Reinforcements (price per floor zone)	\$250 each
Replacements (price per l.f. of steel)	\$35/l.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 4. Steel members sagging

- What will happen in this case if work is not done? \_\_\_\_\_

• Correction: Typical Methods and Suggested Unit Price	Shoring Reinforcements (price per zone)	\$6/l.f.
	Structural survey	\$200 each
	Remove loading	\$5/s.f.
	Replacement	\$35/l.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 5. Concrete beams and columns cracked

- What will happen in this case if work is not done? \_\_\_\_\_

• Correction: Typical Methods and Suggested Unit Price	Structural survey	
	Shoring	\$30/l.f.
	Replacement	\$1,500/l.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 6. Concrete beams, columns and bearing walls spalling

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price Patching and painting \$6.50/s.f.  
Structural survey  
Replacement \$500/l.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 7. Masonry bearing wall cracked

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price Pointing and patching \$12/s.f.  
Structural survey  
Replacement \$24/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

facility.....

FY 86

## 8. Masonry bearing walls bowing

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Structural survey      \$16/l.f.  
Shoring      \$24/l.f.  
Replacement

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 9. Masonry bearing walls crumbling

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Patch and rebuild      \$15/s.f.  
Structural survey      \$24/s.f.  
Replacement

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

for preparation of facility.....  
LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 10. Structural collapse of any type

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Structural survey  
Suggested Unit Price Rebuild \$1,500/l.f.  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 11. Fire damaged structure

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Structural survey  
Suggested Unit Price Shoring (price per s.f. of building) \$6/s.f.  
Reinforcement (price per l.f. or each) \$500  
Replacement \$1,500/l.f.  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 12. Building settlement

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Structural survey \_\_\_\_\_  
Suggested Unit Price \_\_\_\_\_  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:

Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:

Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:

Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:

Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## WATER PENETRATION AND DAMAGE

---

D

### Conditions

1. Built-up roofing and flashing leaking
  2. Rubber membrane roofing and flashing leaking
  3. Metal roofing and flashing leaking
  4. Asphalt tile roofing leaking
  5. Slate or tile roofing leaking
  6. Damaged or missing flashings
  7. Damaged or missing gutters and downspouts
  8. Leaking metal wall panels or siding
  9. Leaking wood siding
  10. Cracked or spalled precast concrete work
  11. Leaking through windows
  12. Leaking around doors
  13. Leaking at vents and hatches
  14. Leaking through basement walls
  15. Leaking through basement floors
  16. Site flooding
  17. Erosion
  18. Weakened or inadequate flood control systems
  19. Sewage pipe stoppage
  20. Storm drain stoppage
  21. Pipe corrosion
  22. Tank failure
  23. Inoperative sewage pump
  24. Inoperative sump pumps
-

WATER PENETRATION AND DAMAGE

Any condition which, if not addressed, will cause personal injury due to catastrophic flooding, water damage to contents, structure deterioration, loss of building systems, major repair expenses and/or loss of use of building.

TYPICAL CONDITIONS

1. Built up roofing and flashing leak

• What will happen in this case if work is not done? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

• Correction: Typical Methods and Suggested Unit Price	Repair	\$4/s.f.
	Replacement	\$5/s.f.
	Replacement with different material	\$5/s.f.

Method proposed and locations: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 2. Rubber membrane roofing and flashing leak

- What will happen in this case if work is not done? \_\_\_\_\_

Correction: Typical Methods and	Repair	\$4/s.f.
Suggested Unit Price	Replacement	\$5/s.f.
	Replacement with different material	\$5/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 3. Metal roofing and flashing leak

- What will happen in this case if work is not done? \_\_\_\_\_

Correction: Typical Methods and	Repair	\$10/s.f.
Suggested Unit Price	Replacement	\$18/s.f.
	Replacement with different material	\$14/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 4. Asphalt shingle roofing leak

- What will happen in this case if work is not done? \_\_\_\_\_

● Correction: Typical Methods and Suggested Unit Price	Repair (price per s.f. of building)	<u>\$1.50/s.f.</u>
	Replacement (price per s.f. of building)	<u>\$3.50/s.f.</u>
	Replacement with different material (price per s.f. of building)	<u>\$ .2.50/s. f</u>

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 5. Slate or tile roofing leak

- What will happen in this case if work is not done? \_\_\_\_\_

● Correction: Typical Methods and Suggested Unit Price	Repair	<u>\$12/s.f.</u>
	Replacement	<u>\$14/s.f.</u>
	Replacement with different material	<u>\$6.50/s.f.</u>

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 6. Damaged or missing flashing

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Repair      \$6/1.f.  
Replacement      \$14/1.f.  
Replacement with different material      \$10/1.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 7. Gutter or downspouts damaged or missing

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Repair      \$5/1.f.  
Replacement      \$10/1.f.  
Replacement with different material      \$7/1.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 8. Metal wall panels or siding leaking

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Repair (\$1,000 min.)	\$15/s.f.
Replacement	\$15/s.f.
Replacement with different material	\$10/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 9. Wood siding leaking

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Repair (\$1,000 Min.)	\$2/s.f.
Replacement	\$6/s.f.
Replacement with different material	\$3/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

10. Precast concrete work cracked or spalled

- What will happen in this case if work is not done? \_\_\_\_\_

- |   |                                 |                                     |                     |
|---|---------------------------------|-------------------------------------|---------------------|
| ● | Correction: Typical Methods and | Repair (\$1,000 min.)               | <u>\$8/s.f.</u>     |
|   | Suggested Unit Price            | Replacement                         | <u>\$5,000 min.</u> |
|   |                                 | Replacement with different material | \$20/s.f.           |

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

---

Cost =

**Total Estimated Construction Cost (E.C.C.) =**

**Total Project Cost (including D.C.P.O. costs):**      E.C.C. x 1.33 =

## 11. Window leaking

- What will happen in this case if work is not done?

- |   |  |                   |                                 |
|---|--|-------------------|---------------------------------|
| ● | Correction: Typical Methods and Suggested Unit Price | Repair            | <u>\$5/s.f. or \$100 ea.</u>    |
|   |  | Seal              | <u>\$1/l.f. or \$50 ea.</u>     |
|   |  | Replace           | <u>\$12/s.f. or \$1,000 ea.</u> |
|   |  | Add storm windows | <u>\$3/s.f. or \$200 ea.</u>    |
|   |  | Weatherstrip      | <u>\$1.50/s.f. or \$100 ea.</u> |

Method proposed and locations: \_\_\_\_\_

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

---

Cost =

Total Estimated Construction Cost (E.C.C.) =

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 =

# Preservation Workbook

facility.....

for preparation of

# LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

## 12. Doors leaking

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- |   |                                 |              |                   |
|---|---------------------------------|--------------|-------------------|
| ● | Correction: Typical Methods and | Repair       | <u>\$100/door</u> |
|   | Suggested Unit Price            | Replace      | <u>\$550 each</u> |
|   |                                 | Weatherstrip | <u>\$100/door</u> |

Method proposed and locations: \_\_\_\_\_

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost: \_\_\_\_\_

---

Cost = \_\_\_\_\_

**Total Estimated Construction Cost (E.C.C.) =**

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 =

### 13. Vents and hatches leaking

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_

- |   |                                 |         |                     |
|---|---------------------------------|---------|---------------------|
| ● | Correction: Typical Methods and | Repair  | <u>\$500 each</u>   |
|   | Suggested Unit Price            | Replace | <u>\$2,000 each</u> |
|   |                                 | Seal    | \$100 each          |

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

Cost =

**Total Estimated Construction Cost (E.C.C.) =**

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 =

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 14. Basement walls leaking

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Grout cracks and holes	\$20/l.f.
Exterior waterproofing	\$8/s.f.
Interior waterproofing	\$20/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 15. Basement floors leaking

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Grout cracks and holes	\$20/l.f.
Interior waterproofing	\$20/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 16. Site flooding

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
 Repair drainage systems \_\_\_\_\_  
 New drainage systems \_\_\_\_\_  
 Regrading \_\_\_\_\_

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 17. Erosion

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
 Correction of drainage  
 Planting \$5/s.f.  
 Paving \$3/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

18. Weakened or inadequate flood control systems

- What will happen in this case if work is not done? \_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price

Install new levee

\$5.50/c.y.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

19. Sewage pipe stoppage

- What will happen in this case if work is not done? \_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price

Replace 3" pipe

Replace 4" pipe

Replace 8" pipe

Augur system

\$7/ft.

\$9/ft.

\$14/ft.

\$8/ft.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 20. Storm drain stoppage

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Replace 14" pipe \$27/ft.  
Replace 20" pipe \$35/ft.  
Augur system \$12/ft.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 21. Pipe Corrosion

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Replace pipe See Piping  
Nomograph\*

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

\* See Appendix J.1.

# Preservation Workbook

facility.....

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

## 22. Tank failure

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price Replace tank \$1.60/Gallon Capacity  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 23. Inoperative sewage pump

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price Replace pump \$35/GPM  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

facility.....

## 24. Inoperative sump pumps

- What will happen in this case if work is not done? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- Correction: Typical Methods and      Replace pump      \$28/GPM  
    Suggested Unit Price  
 Method proposed and locations: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
 Local or special conditions adding to unit cost: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ Cost = \_\_\_\_\_  
    Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
 Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

- (#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_
- What will happen in this case if work is not done? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  - Correction:  
 Method proposed and locations: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
 Local or special conditions adding to unit cost: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ Cost = \_\_\_\_\_  
    Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
 Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:

Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:

Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_

Correction:

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_

Correction:

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## FAILURE OF FINISH SURFACES

---

E

### Conditions

1. Worn out resilient floors (V.A.T., sheetvinyl, cork, linoleum, asphalt tile)
  2. Lifting resilient floors
  3. Damaged resilient flooring
  4. Dusting concrete floors
  5. Carpet worn out
  6. Damaged carpet
  7. Wood floors worn out
  8. Wood floors damage
  9. Terrazzo pitted and/or cracked
  10. Ceramic tiles coming off floors and/or walls
  11. Broken ceramic tile
  12. Grout failure in ceramic tile
  13. Plaster walls and/or ceilings cracked or broken
  14. Water damaged plaster
  15. Drywall walls and/or ceilings cracked or broken
  16. Drywall damaged by water
  17. Wood paneling damaged
  18. Vinyl wall covering delaminating
  19. Vinyl wall covering damaged
  20. Acoustic wall panels damaged
  21. Acoustic lay-in panel ceilings damaged
  22. 12 x 12 acoustic tile ceilings damaged
  23. Metal ceilings damaged
  24. Wood ceilings damaged
  25. Sprayed acoustic ceilings damaged
  26. Cabinetwork doors and drawers not working
  27. Cabinetwork and/or countertops damaged
  28. Damaged laboratory tops
  29. Repainting
-

## FAILURE OF FINISH SURFACES

Any condition which, if not addressed, will allow further deterioration which will require more costly repairs or appears sufficiently unsightly to cause harm to the normal functioning of the facility. Such conditions should be beyond the scope of normal maintenance procedures.

### TYPICAL CONDITIONS

1. Resilient floors worn out (V.A.T., sheet vinyl, cork, linoleum, asphalt tile)

• What will happen in this case if work is not done? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

• Correction: Typical Methods and	Replacement	\$3/s.f.
Suggested Unit Price	Replacement with other	
	materials	\$2/s.f.

Method proposed and locations: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 2. Resilient floors lifting

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Repair (\$500 min.) \$0.75/s.f.  
Suggested Unit Price Replacement \$3/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 3. Resilient flooring damaged

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Repair (500 min.) \$0.70/s.f.  
Suggested Unit Price Replacement \$3/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 4. Concrete floor dusting

- What will happen in this case if work is not done? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- Correction: Typical Methods and Apply sealer/hardener  
 Suggested Unit Price (\$1,000 min.) \$0.50/s.f.  
 Method proposed and locations: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
 Local or special conditions adding to unit cost: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ Cost = \_\_\_\_\_  
 Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
 Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 5. Carpet Worn

- What will happen in this case if work is not done? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- Correction: Typical Methods and Repair (\$1,000 min.) \$30/s.y.  
 Suggested Unit Price Replacement \$20/s.y.  
 Replacement with other materials \$2/s.f.  
 Method proposed and locations: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
 Local or special conditions adding to unit cost: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ Cost = \_\_\_\_\_  
 Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
 Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

6. Carpet damaged

- What will happen in this case if work is not done? \_\_\_\_\_

- | Correction: Typical Methods and Suggested Unit Price | Correct source of damage        |                  |
|--|---------------------------------|------------------|
|  | Repair                          | <u>\$30/s.y.</u> |
|  | Replacement                     | <u>\$20/s.y.</u> |
|  | Replacement with other material | \$2/s.f.         |

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

---

Cost =

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

7. Wood floors worn

- What will happen in this case if work is not done?

- |   |  |  |                             |
|---|--|--|-----------------------------|
| ● | Correction: Typical Methods and Suggested Unit Price | Refinishing (\$1,000 min.) Replacement | <u>\$2/s.f.</u><br>\$5/s.f. |
|---|--|--|-----------------------------|

Method proposed and locations: \_\_\_\_\_

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

Cost =

Total Estimated Construction Cost (E.C.C.) =

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 =

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

- What will happen in this case if work is not done? \_\_\_\_\_

- Method proposed and locations: \_\_\_\_\_

.....

---

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

Cost = \_\_\_\_\_

**Total Project Cost (including D.C.P.O. costs):**      E.C.C. x 1.33 = \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_

- Method proposed and locations:

\_\_\_\_\_

\_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

---

Cost =

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 =

Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

10. Ceramic tiles coming off floors or walls

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Correct cause of failure  
Suggested Unit Price Replace tiles \$5/s.f.  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

11. Ceramic tile broken

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Replace (\$500 min) \$5/s.f.  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

## 12. Grout failure in ceramic tile

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_

RegROUT (\$500 min.)

\$1.10/s.f

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 13. Plaster walls or ceilings cracked or broken

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_

Patch

\$2/s.f.

Replace

\$4/s.f.

Replace with other material

\$2.50/s.f.

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

14. Plaster damaged by water

- What will happen in this case if work is not done?

- |   |                                 |                             |                 |
|---|---------------------------------|-----------------------------|-----------------|
| ● | Correction: Typical Methods and | Correct cause               | <u>\$2/s.f.</u> |
|   | Suggested Unit Price            | Repair                      | <u>\$4/s.f.</u> |
|   |                                 | Replace with other material | \$2.50/s.f.     |

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

Cost =

Total Estimated Construction Cost (E.C.C.) =

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 =

15. Drywall walls or ceilings cracked or broken

- What will happen in this case if work is not done?

- |   |                                 |                    |                    |
|---|---------------------------------|--------------------|--------------------|
| ● | Correction: Typical Methods and | Patch (\$500 min.) | <u>\$1.50/s.f.</u> |
|   | Suggested Unit Price            | Replace            | \$2.50/s.f.        |

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

---

Cost =

Total Estimated Construction Cost (E.C.C.) =

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 =

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 16. Drywall damaged by water

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Correct cause  
Patch      \$1.50/s.f.  
Replace      \$2.50/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 17. Wood paneling damaged

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Repair      \$2/s.f.  
Replace      \$3/s.f.  
Replace with other material      \$2.50/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 18. Vinyl wall covering delaminated

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Repair (\$500 min.)	\$1/s.f.
Replace	\$1.75/s.f.
Replace with other material	\$0.75/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 19. Vinyl wall covering damaged

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price
 

Repair	\$1/s.f.
Replace	\$1.75/s.f.
Replace with other material	\$0.75/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 20. Acoustic wall panels damaged

- What will happen in this case if work is not done? \_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price  
 Repair (\$500 min.) \$6/s.f.  
 Replace \$9/s.f.  
 Method proposed and locations: \_\_\_\_\_
- Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_
- Local or special conditions adding to unit cost: \_\_\_\_\_
- Cost = \_\_\_\_\_
- Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_
- Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 21. Acoustic lay-in panel ceilings damaged

- What will happen in this case if work is not done? \_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price  
 Correct cause of damage  
 Repair \$0.85/s.f.  
 Replace \$2/s.f.  
 Replace with other materials \$1.50/s.f.  
 Method proposed and locations: \_\_\_\_\_
- Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_
- Local or special conditions adding to unit cost: \_\_\_\_\_
- Cost = \_\_\_\_\_
- Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_
- Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

for preparation of facility.....  
LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 24. Wood ceilings damaged

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Correct cause of damage  

	Repair	<u>\$4/s.f.</u>
	Replace	<u>\$8/s.f.</u>
	Replace with other material	<u>\$1.50/s.f.</u>

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 25. Sprayed acoustic ceilings damaged

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Correct cause of damage  

	Repair (\$1,000 min.)	<u>\$5/s.f.</u>
	Replace	<u>\$4/s.f.</u>
	Replace with other material	<u>\$1.50/s.f.</u>

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

24. Wood ceilings damaged

- What will happen in this case if work is not done? \_\_\_\_\_

- | Correction: Typical Methods and<br>Suggested Unit Price | Correct cause of damage     |             |
|---|-----------------------------|-------------|
|   | Repair                      | \$4/s.f.    |
|   | Replace                     | \$8/s.f.    |
|   | Replace with other material | \$1.50/s.f. |

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

---

Cost =

**Total Estimated Construction Cost (E.C.C.) =**

**Total Project Cost (including D.C.P.O. costs):** E.C.C. x 1.33 =

25. Sprayed acoustic ceilings damaged

- What will happen in this case if work is not done?

- | Correction: Typical Methods and<br>Suggested Unit Price | Correct cause of damage     |             |
|---|-----------------------------|-------------|
|   | Repair (\$1,000 min.)       | \$5/s.f.    |
|   | Replace                     | \$4/s.f.    |
|   | Replace with other material | \$1.50/s.f. |

Method proposed and locations:

Total quantity	x unit price	=
100	10	1000
200	9	1800
300	8	2400
400	7	2800
500	6	3000
600	5	3000
700	4	2800
800	3	2400
900	2	1800
1000	1	1000

Local or special conditions adding to unit cost:

Cost =

**Total Estimated Construction Cost (E.C.C.) =**

**Total Project Cost (including D.C.P.O. costs):** E.C.C. x 1.33 =

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

FY 86

26. Cabinetwork doors and drawers not working

- What will happen in this case if work is not done? \_\_\_\_\_

- |   |                                 |                       |                  |
|---|---------------------------------|-----------------------|------------------|
| ● | Correction: Typical Methods and | Repair (\$1,000 min.) | <u>\$10/l.f.</u> |
|   | Suggested Unit Price            | Replace               | \$150/l.f.       |

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost =

Total Estimated Construction Cost (E.C.C.) =

**Total Project Cost (including D.C.P.O. costs):** E.C.C. x 1.33 =

27. Cabinetwork or countertop damaged

- What will happen in this case if work is not done?

- | Correction: Typical Methods and<br>Suggested Unit Price | Correct cause of damage<br>Repair<br>Replace | <u>\$10/1.f.</u><br><u>\$30/1.f.</u> |
|---|--|--------------------------------------|
| ●   |  |                                      |

**Method proposed and locations:**

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

Cost =

**Total Estimated Construction Cost (E.C.C.) =**

**Total Project Cost (including D.C.P.O. costs):** E.C.C. x 1.33 =

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 28. Laboratory tops damaged

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Repair (\$500 min.) \$20/s.f.  
Suggested Unit Price Replace (\$1,000 min.) \$40/s.f.  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 29. Repainting

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Interior \$0.60/s.f.  
Suggested Unit Price Exterior \$0.80/s.f.  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

NOTE: All or majority of building

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN . FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## FREEZING

### Conditions

1. Inoperative or inadequate heat distribution devices
2. Inoperative or inadequate heating terminal devices
3. Inoperative or inadequate boilers or furnaces
4. Inoperative heating controls
5. Insufficient insulation
6. Inoperative dry pipe sprinkler system

# FREEZING

Any condition, which if not addressed, will cause expansion, bursting, deterioration or other building system damage due to freezing requiring major repair expense and/or loss of use of building.

## TYPICAL CONDITIONS

### 1. Inoperative or inadequate heat distribution piping

- What will happen in this case if work is not done? \_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price      Install new piping      See Piping Nomograph\*  
Method proposed and locations: \_\_\_\_\_
- Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_
- Local or special conditions adding to unit cost: \_\_\_\_\_
- Cost = \_\_\_\_\_
- Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_
- Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

\*See Appendix J.1.

# Preservation Workbook

facility.....

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

## 2. Inoperative or inadequate heat terminal devices

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Install new device      \$70/MBH  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

## 3. Inoperative or inadequate boilers or furnaces

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Install additional boiler capacity      \$15/MBH

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

4. Inoperative heating controls

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Install new controls Unique  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

5. Insufficient insulation

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Install new insulation \$2.70/s.f.  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 6. Inoperative dry pipe sprinkler system

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price Replace 4" dry pipe valve components \$1,800  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

---

# Preservation Workbook

for preparation of      LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN      FY 86

---

## LIFE EXPECTANCY

---

### Conditions

1. Boilers
  2. Electric Motors
  3. Chillers
  4. Controls
  5. Cooling tower
  6. Air handling units
  7. Pumps
  8. Generators
  9. Transformers
  10. Turbines
  11. DHW Heaters
  12. Elevator inoperative
  13. Elevator cab damaged
  14. Escalator inoperative
  15. Escalator damaged
  16. Dumbwaiter inoperative
- 

G

LIFE EXPECTANCY

TYPICAL CONDITIONS

Any condition which, if not addressed, will lead to further deterioration and more costly repairs later than if corrected now.

1. Boilers

- What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

- Correction: Typical Methods and Install new boilers \$15/MBH  
Suggested Unit Price

Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 2. Electric Motors

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Install new motors \$40/HP  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 3. Chillers

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Install new chiller \$540/Ton  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 4. Controls

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Install new controls Unique  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 5. Cooling Tower

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Install new tower \$160/Ton  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

## 6. Air Handling Units

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Install new air  
Suggested Unit Price handling unit \$5.50/CFM  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 7. Pumps

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Install new pump \$40/GPM  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 8. Generators

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Install new generator \$450/KW  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 9. Transformers

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Install new transformer \$40/KVA  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 10. Turbines

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Install new turbine \$400/HP  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 11. Domestic Hot Water Heaters

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Install new heater \$12/MBH  
Suggested Unit Price  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

12. Elevator inoperative

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Repair \$5,000 min.  
Suggested Unit Price Replace operating machinery  
(electric) \$35,000 min.  
Replace operating machinery  
(hydraulic) \$10,000

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

---

Cost =

**Total Estimated Construction Cost (E.C.C.) =**

**Total Project Cost (including D.C.P.O. costs):**      **E.C.C. x 1.33 =**

13. Elevator cab damaged

- What will happen in this case if work is not done?

- |   |  |                       |                    |
|---|--|-----------------------|--------------------|
| ● | Correction: Typical Methods and Suggested Unit Price | Repair panels or trim | <u>\$2,000/Cab</u> |
|---|--|-----------------------|--------------------|

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

Cost =

**Total Estimated Construction Cost (E.C.C.) =**

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

Preservation Workbook facility.....  
for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

14. Escalator inoperative

- What will happen in this case if work is not done? \_\_\_\_\_

- |   |  |   |          |
|---|--|---|----------|
| ● | Correction: Typical Methods and Suggested Unit Price | Repair operating machinery (\$5,000 min.) | \$15,000 |
|   |  | Replace                                   | \$35,000 |

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

---

Cost #

**Total Estimated Construction Cost (E.C.C.) =**

**Total Project Cost (including D.C.P.O. costs):** E.C.C. x 1.33 =

15. Escalator damaged

- What will happen in this case if work is not done?

- |   |   |                  |                 |
|---|---|------------------|-----------------|
| ● | Correction: Typical Methods and<br>Suggested Unit Price | Repair (\$5,000) | <u>\$15,000</u> |
|---|---|------------------|-----------------|

Method proposed and locations:

Total quantity	x unit price	=
----------------	--------------	---

Local or special conditions adding to unit cost:

---

Cost =

**Total Estimated Construction Cost (E.C.C.) =**

**Total Project Cost (including D.C.P.O. costs):** E.C.C. x 1.33 =

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 16. Dumbwaiter inoperative

- What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

- Correction: Typical Methods and Repair (\$1,000 min.) \$3,000  
Suggested Unit Price Replacement \$10,000

Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## (#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

Preservation Workbook

facility..... ..

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

---

# Preservation Workbook

for preparation of      LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN      FY 86

---

## HABITABILITY

H

### Conditions

1. Inadequate heating
  2. Inadequate cooling
  3. Inadequate operable plumbing fixtures
  4. Inadequate lighting
  5. Inadequate ventilation
  6. Excessive noise
  7. Presence of airborne asbestos
  8. Presence of lead paint in spaces occupied by children under the age of six
-

# HABITABILITY

Any condition which, if not addressed, will cause loss of normal use of the facility because the environment required by law is not present. Habitability is affected by failure of such systems as heating, cooling, ventilation, plumbing and life safety.

## TYPICAL CONDITIONS

### 1. Inadequate heating

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_

- Correction: Typical Methods and      Install new heating  
   Suggested Unit Price      system      \$5.00/s.f.  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 2. Inadequate cooling

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Install new cooling system      \$10/s.f.  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

## 3. Inadequate operable plumbing fixtures

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price      Install new fixtures      \$1,000/fixture  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 4. Inadequate lighting

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price      Install new lighting      \$100/fixture  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

## 5. Inadequate ventilation

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction: Typical Methods and Suggested Unit Price      Install new ventilation      \$2.25/CFM  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs):      E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## 6. Excessive noise

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Insulate and soundproof \$3.00/s.f.  
Remove source of noise Unique  
Install vibration eliminators \$20/HP

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

## 7. Presence of loose asbestos

- What will happen in this case if work is not done? \_\_\_\_\_

- Correction: Typical Methods and Suggested Unit Price  
Remove ceiling or structural asbestos \$6.00/s.f.  
Remove asbestos pipe insulation \$5.00/s.f.

Method proposed and locations: \_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

6. Presence of lead paint in spaces occupied by children under the age of six

• What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

• Correction: Typical Methods and Remove lead paint \$1.00/s.f.  
Suggested Unit Price

Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

• What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

• Correction:  
Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

---

# Preservation Workbook

for preparation of      LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN      FY 86

---

OTHER  
HAZARDS

---

---

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

# Preservation Workbook

facility.....

for preparation of

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

(#) .. (Other Conditions)

- What will happen in this case if work is not done?

- Correction:

Method proposed and locations:

Total quantity x unit price =

Local or special conditions adding to unit cost:

Cost =

Total Estimated Construction Cost (E.C.C.) =

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =

(#) .. (Other Conditions)

- What will happen in this case if work is not done?

- Correction:

Method proposed and locations:

Total quantity x unit price =

Local or special conditions adding to unit cost:

Cost =

Total Estimated Construction Cost (E.C.C.) =

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 =

# Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN

FY 86

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_\_. (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Correction:  
Method proposed and locations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_  
Local or special conditions adding to unit cost: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Cost = \_\_\_\_\_  
Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_  
Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

Preservation Workbook

facility.....

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

(#) \_\_\_\_ . (Other Conditions) \_\_\_\_\_

- What will happen in this case if work is not done? \_\_\_\_\_

\_\_\_\_\_

- Correction:  
Method proposed and locations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total quantity \_\_\_\_\_ x unit price \_\_\_\_\_ = \_\_\_\_\_

Local or special conditions adding to unit cost: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Cost = \_\_\_\_\_

Total Estimated Construction Cost (E.C.C.) = \_\_\_\_\_

Total Project Cost (including D.C.P.O. costs): E.C.C. x 1.33 = \_\_\_\_\_

---

# Preservation Workbook

for preparation of      LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN      FY 86

---

## APPENDIX

---

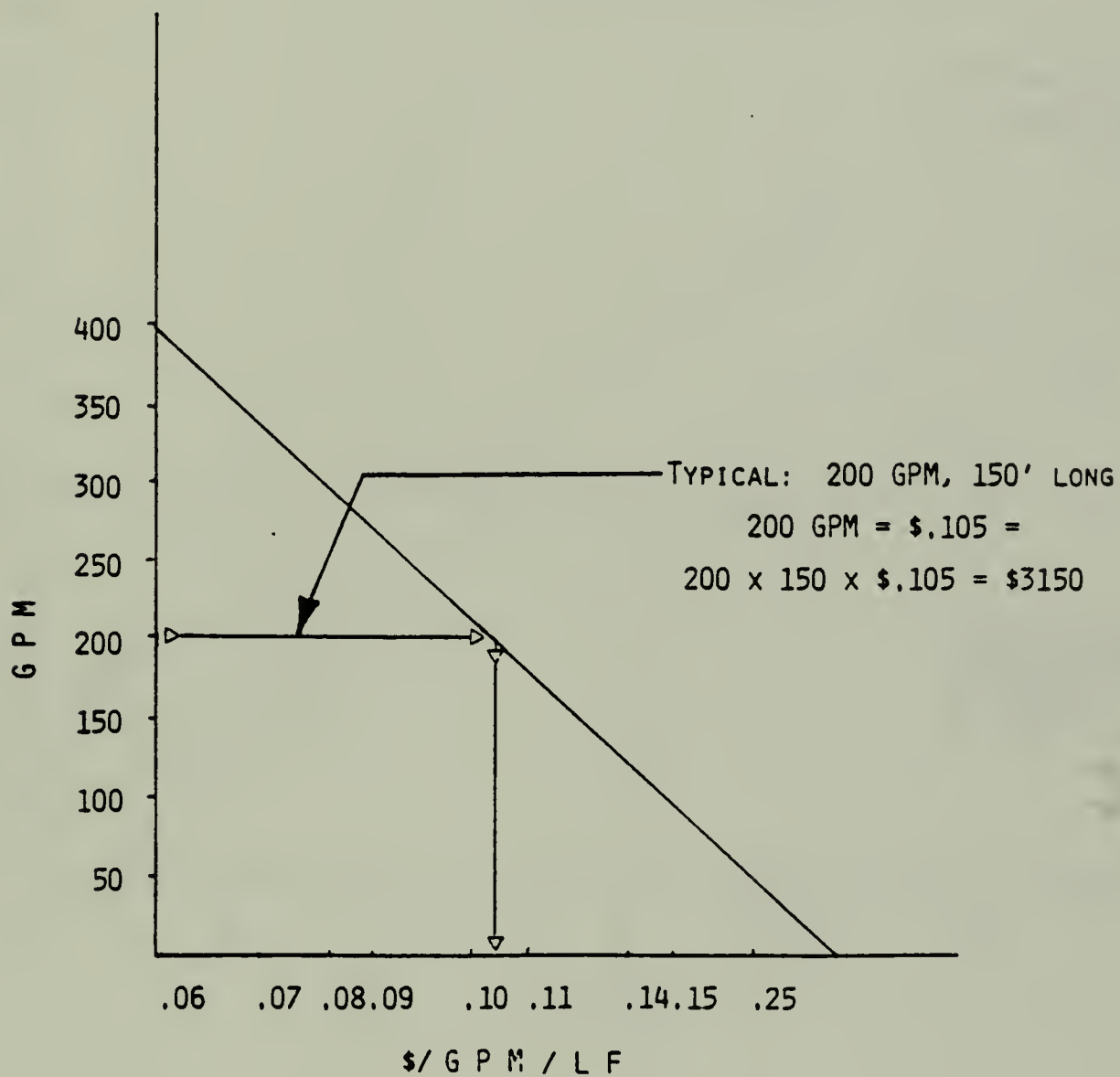
1. Piping Nomograph
  2. Cable Nomograph
-



# Preservation Workbook

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## NOMOGRAPH: PIPING COSTS





# Preservation Workbook

for preparation of LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FY 86

## NOMOGRAPH: CABLE REPLACEMENT

